(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 28 July 2005 (28.07.2005)

(10) International Publication Number WO 2005/068276 A1

- (51) International Patent Classification⁷: B62D 1/12, 1/02
- (21) International Application Number:

PCT/DK2005/000010

- (22) International Filing Date: 11 January 2005 (11.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PA 2004 00032

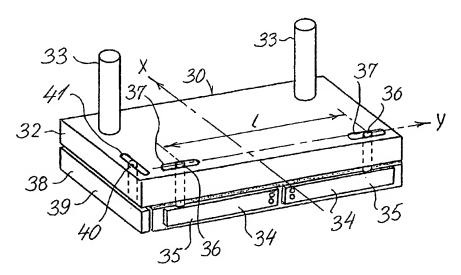
13 January 2004 (13.01.2004)

- (71) Applicant (for all designated States except US): BOR-RINGIA INDUSTRIE AG [CH/CH]; Richenmattweg 35, CH-4107 Ettingen (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KOFOED, Henrik [DK/DK]; Bakkergårdsvej 1b, DK-3060 Espergærde (DK). BECH, listed, Mogens [DK/DK]; Birkerød Parkvej 55, DK-3460 Birkerød (DK).

- (74) Agent: PLOUGMANN & VINGTOFT A/S; Sundkrogsgade 9, Post Office Box 831, DK-2100 Copenhagen_Ø (DK).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A MANUALLY ACTUABLE STEERING DEVICE



(57) Abstract: Driving and steering means of a wheeled, power driven vehicle, such as a power driven hospital bed, is actuated by an actuating device (30). This actuating device comprises a base member (31) and an actuating member (32) having gripping means, such as a pair of spaced handles (33), and being supported by the base member so as to be displaceable thereon along a plane. A first force transducer (34) is arranged to receive a force component manually applied to the actuating member in a predetermined first direction only, along said plane, and a second force transducer (38) is arranged to receive a force component manually applied to the actuating member in a predetermined second direction only, transversely to the first direction along said plane. Each of these force transducers is adapted to generate an output signal to the driving and steering means responsive to the strength of the force component received. Preferably, the first and second directions extend at mutual right angles, and one of the directions extends in the normal direction of travel of the vehicle.

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.